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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/593,178

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Veselin Brankovic

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FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

TRINH, SONNY

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,178

Applicant(s)

BRANKOVIC ET AL.

Examiner

Sonny TRINH

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-33 is/are allowed.
- 6) ☒ Claim(s) 52-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 34-51 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 22-33 by remarks filed 11/22/02 (paper number 15, pages 2-4) are convincing, therefore claims 22-33 are allowed.

Applicant's arguments with respect to claims 52-54 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 52** is rejected under 35 U.S.C. 103(a) as being unpatentable over Honcharenko et al. ("Honcharenko"; U.S. Patent Number 6,349,217) in view of Gutleber ("Gutleber"; U.S. Statutory Invention Registration Number H288).

As to **claim 52**, Honcharenko discloses a multi-mode/multi-rate fixed wireless communication system having a defined geographic coverage area for high data rate (column 2 lines 20-44). Honcharenko further discloses that the base station antenna beam must be sufficiently wide ("wide beam") to allow all users access to the random

access channel at any time (column 5, lines 28-45). However, Honcharenko does not disclose a mobile terminal provided with a narrow beam antenna.

In an analogous art, Gutleber discloses an interference canceling transmitter configured to provide a low probability of intercept in a dense communications environment (column 1, see also abstract). Gutleber further discloses that the mobile subscriber is provided with a narrow beam antenna ("pencil-like beam", column 2 lines 19-37).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the narrow beam antenna at the mobile station, as taught by Gutlemer, to the wireless transmission system of Honcharenko in order to minimize interference causes by multiple radiating sources as suggested by Gutleber in the cited paragraph.

The combination of Honcharenko and Gutlemer does not disclose that the system is designed for the transmission of data in the 60 GHz range. However the use of the 60 Ghz frequency range for high bit rate data transmission is well known and widely used in Europe and also in Japan for its unlicensed requirement and the Examiner takes Official Notice of such high bit rate (60 GHz.). The motivation for using the 60 GHz. bit rate is for high speed data transmission that do not require any license.

3. **Claims 53-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Honcharenko et al. ("Honcharenko"; U.S. Patent Number 6,349,217), Gutleber ("Gutleber"; U.S. Statutory Invention Registration Number H288) and in further view of Fischer et al. (Fischer; U.S. Patent Number 6,360,075).

As to **claim 53**, the combination of Honcharenko, Gutlemer and the Official Notice taken by the Examiner discloses the invention except for the fixed hub is provided with an antenna with a kidney shaped in cross section. In an analogous art, Fischer teaches a mobile terminal having a detachable subscriber identity module for storing profile of a mobile subscriber of the mobile terminal (col. 4, lines 10-48). Simpson uses the system and method for transmitting data. Fischer further teaches the hub is provided with an antenna with a kidney shaped in cross section ("cardioid" column 4 line 51 to column 5 line 9).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Honcharenko and Gutlemer, the kidney shaped antenna, as taught by Fischer to reduce potential interference between transmissions from subscribers and transmissions to central hub (see cited passage).

As to **claim 54**, the combination of Honcharenko, Gutlemer and Fischer discloses the invention. However, the combination does not disclose that the antenna is mounted on the ceiling and said kidney shape beam has a local minimum level in said cross section in a direction opposing said ceiling. However, this claim merely add the intention of using the system in various environments and are obvious to one of ordinary skill in the art.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny Trinh whose telephone number is (703) 305-1961. The examiner can normally be reached Monday through Thursdays from 7:00 am to 4:00 p.m., and on alternate Fridays.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Sonny Trinh *S. T.*

Patent Examiner
2/4/03

SONNY TRINH *S. T.*
PATENT EXAMINER